3rd-5th Grade Science Fair Timeline

Each assignment listed will count as a class work/homework grade, while the tri-board and paper will count as tests/project grades. For questions, please contact your student’s science teacher or Courtney Spaeder at cspaeder@harmonytx.org.

Thursday, September 6 at 6:30PM
Science Fair Parent Meeting
HSA Fort Worth Cafeteria

Due Friday, September 14
Project Selection Form with parent signature

Due Friday, September 21
Variables Worksheet with parent signature

Tuesday, October 9 at 6:30PM
Science Fair Parent Meeting
HSA Fort Worth Cafeteria

Due Friday, October 12
Sources (at least 2 books or websites) with parent signature

Due Tuesday, October 23
Introduction due

Due Friday, November 2
Typed procedure due

Due Tuesday, November 13
Results due

Due Tuesday, November 27
Conclusion due

Friday, November 30
Tri-boards due

Due Monday, December 3
Paper due

Friday, December 7
School wide science fair
Awards Ceremony 1:30
Dear Parents,

Harmony Science Academy will be holding the third through fifth grade science fair this fall. We hope that with your enthusiastic encouragement, your child will produce an interesting and educational project. This will be an exciting experience for your child! Although students will receive a help at school from teachers, parent support and assistance are essential to your child’s success. A general rule of thumb to go by is:

- 4th and 5th graders should be doing almost the entire science project by themselves
- 3rd graders should be able to do many parts unassisted

We are confident the following benefits will result from your child’s participation in the Science Fair:

- Reinforcement of grade level science, literacy, and math skills
- Fostering curiosity, awareness, and creativity
- Increased scientific knowledge
- Learning research techniques
- Growth in ability to work independently
- Having fun with science!

The requirements for the fair include: following the set timeline and submitting work by the due date, completion of an experiment, making a tri-board, finding sources, and a science fair paper. Third grade students will write a paper two pages in length, fourth graders will write a paper three pages in length, and fifth graders will write a paper four pages in length. Please do not be discouraged, as this will be a collaborative effort among science, math, English, computer, character education teachers, students, and parents.

In addition to the opportunity to work on a project, the Science Fair provides students with an increased awareness of science and an opportunity for them to develop positive attitudes about themselves and their work. The science project allows children to use critical thinking and problem solving skills learned in science and in math.

Attached is the Science Fair timeline for fall 2012. Please review these dates carefully and make sure your student submits all assignments on time. Your student’s teacher will remind both you and your student on a regular basis of due dates.

If you have any questions, please do not hesitate to contact me or your student’s science teacher.

Sincerely,

Courtney Spaeder
817.263.0700, ext.139
cspaeder@harmonytx.org
Elementary Science Fair
Helpful Hints for Parents

This should be a fun project! Success is when your child asks their own question, completes their project with a smile, and knows more than when they started. Please enjoy this time of discovery and fun for you and your child!

- The science fair project reinforces reading, writing, logic, and math skills as well as creativity.
- The goal is that your child learns “the scientific method” through direct experience by formulating a testable question.
- For their daily reading, it is recommended they choose a science book that can be a research resource for their project.

It is best to guide and answer student questions with questions. You may know the answer but help them discover it themselves. For example, you may want to show them which paragraph in the book to reread rather than giving them the answer.

Although neatness is good, it’s not the main focus. An eight year old can make a data chart with little help. They should do that part while you operate a hot glue gun.

The project does not have to look store bought! It needs to be made by them so that they truly get better every year they participate.

Encourage your child’s artistic side with the display. For example, you can show how the use of color and shapes can be used to show the importance of a part of the display.

If you allow your child to use web sites for research; verify the site is “correct” and then let them use the research found there. Don’t forget:

- Anyone can create a website; this does not mean it is correct information!
- Make sure the web site is run by a large, recognized group such as a college or organization
- Dot “org”, “gov”, or “edu” are usually, though not always, trustworthy for accuracy of content

What is an acceptable science fair project?

- Something that answers a question to which they do not know the answer
- Something they can figure out on their own
- Something they can change somehow, add another variable, and then predict the outcome.
- Students should develop a testable question; they are not simply creating a model

What is not an acceptable science fair project?

- Reproducing results found on the web is not an experiment.
Selecting a Category that Interests YOU!

All Great Projects start with great questions but before you get started on a great question you need to pick a subject or topic that you like. There are three different categories of the Science Fair to choose from. They are:

**Life science:** This category deals with questions about organisms, particularly plans at this level that you might have and want to do an experiment about. Remember that it is against Science Fair Rules to intentionally hurt an organism during an experiment. It is okay to do an experiment on plants, as long as they don’t belong to someone else. For example, an experiment on your mom’s rose bushes unless you ask her first...

Life science also includes studying behaviors, so it’s a perfect category to try taste tests, opinion surveys, behavior training (or even training behavior in humans...like baby brothers or sisters...) But be aware, if you decide to work with humans there is extra paperwork involved...

**Physical Science:** If you like trying to figure out how things work, then this is the category for you! It includes topics about matter and structure, as well as electricity, magnetism, sound or anything else that you might question, “How does it work and what if I do this to it, will it still work?” But remember, you always need to ask an adult first (and always make sure there is one of those adult guys with you when you try it.)

Physical Science also includes the composition of matter and how it reacts to each other. These are the science experiments that may have bubbling and oozing going on, like figuring out what is an acid and what is a base. It is a perfect category to try to mix things together to see what will happen.

Again, if you are experimenting with possibly dangerous things, you need to recruit an adult to help you out.

**Earth and Space Sciences:** This category is really awesome because it covers all sorts of topics that deal with the Earth or objects in space. This includes studying weather, Geology (which is the study of everything that makes up the Earth, like rocks, fossils, volcanoes, etc...), and the study of all that is in space, including the stars, our sun and our planets. Unfortunately this topic is also where most kids mess up and do a collection or model project instead of an “Experiment,” so be careful!!!

**Consumer Science.** This category covers experiments that deal with household products or goods. This includes cleaning supplies, food products and other items you purchase. Just be careful...if you select a project in this category you must have a testable question and variables like the other categories. An example of a project in this category is (and no, you may not use this!) is “Which popcorn pops the fastest? Be creative and have fun!

**Safety First!**

Carefully read the following safety rules BEFORE formulating a question.

- Safety comes first! Make sure you have an adult to assist you in the process and help you design a safe experiment.
- Never eat or drink during an experiment and always keep your work area clean.
- Wear the appropriate safety equipment during your experiment.
- Carefully read and follow directions under adult supervision if using any chemicals.
- No animals, bacteria, fungi (mold), viruses or other hazardous biological agents are allowed. Studies involving human behavior are allowed with a medical professional’s approval before and after experimentation. See your teacher for more information.
- Respect all life forms. Do not perform an experiment that will harm an organism in any way.
- All experiments should be supervised by an adult.
- Dispose of waste properly. If you are not sure how, ask your adult supervisor or teacher.
- Any projects that involve drugs, firearms, or explosives are not permitted.
- Any project that breaks district, local, state, or federal laws are not permitted.
- Use safety on the internet! Always have an adult supervisor with you while researching.
- If you are using sharp tools or electricity have an adult help you.
Project Selection Form  
Due Friday, September 14

Please complete the front and back of this work sheet and turn it in to your teacher no later than Friday, September 14. Your child's science teacher will notify you and your student once his/her project has been approved. Please do not begin experimentation until the project has been approved.

Student name:__________________________________________________________

Science Teacher:_________________________ Class:__________________________

By signing below, I am aware that my student is required to complete a science fair project. I am aware of the materials, cost, safety measures, and time that will be required for this project.

Parent/Guardian (print):________________________________________________

Parent/Guardian Signature:_________________________ Date:______________

Parent e-mail:________________________________________________________

The original science question (known as a problem) my project will answer (solve) is: __________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
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__________________________________________________________________
_________________________

I will need the following materials for my experiment:____________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
My hypothesis for my experiment is:

Please record the procedure for your experiment below (number your steps):